

MS: Mobile Station
 BTS: Base Station Transceiver Subsystem
 BSC: Base Station Controller
 MSC: Mobile Switching Center
 GW: Gateway Exchange
 SU: Subscriber Unit
 LE: Local Exchange
 PSTN: Public Switched Telephone Network

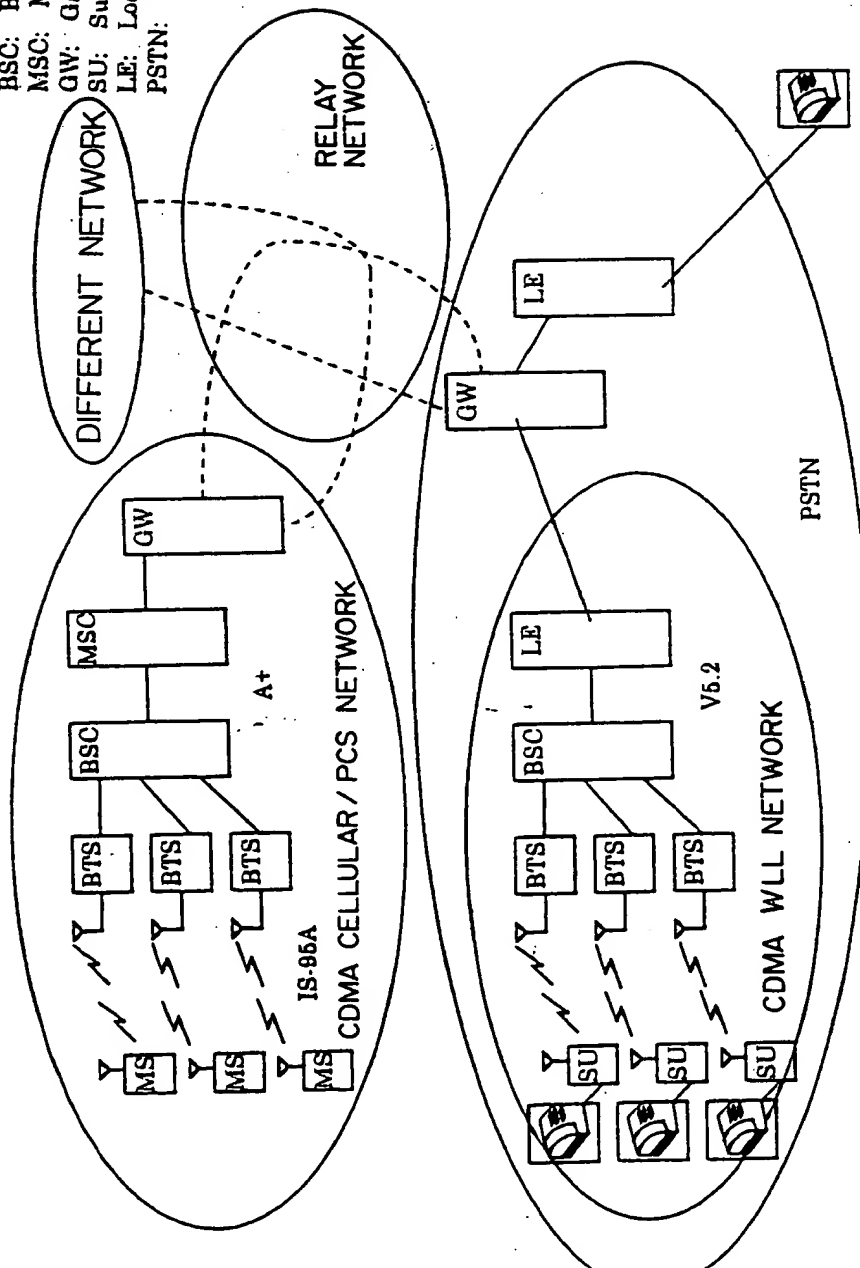


FIG. 1 PRIOR ART

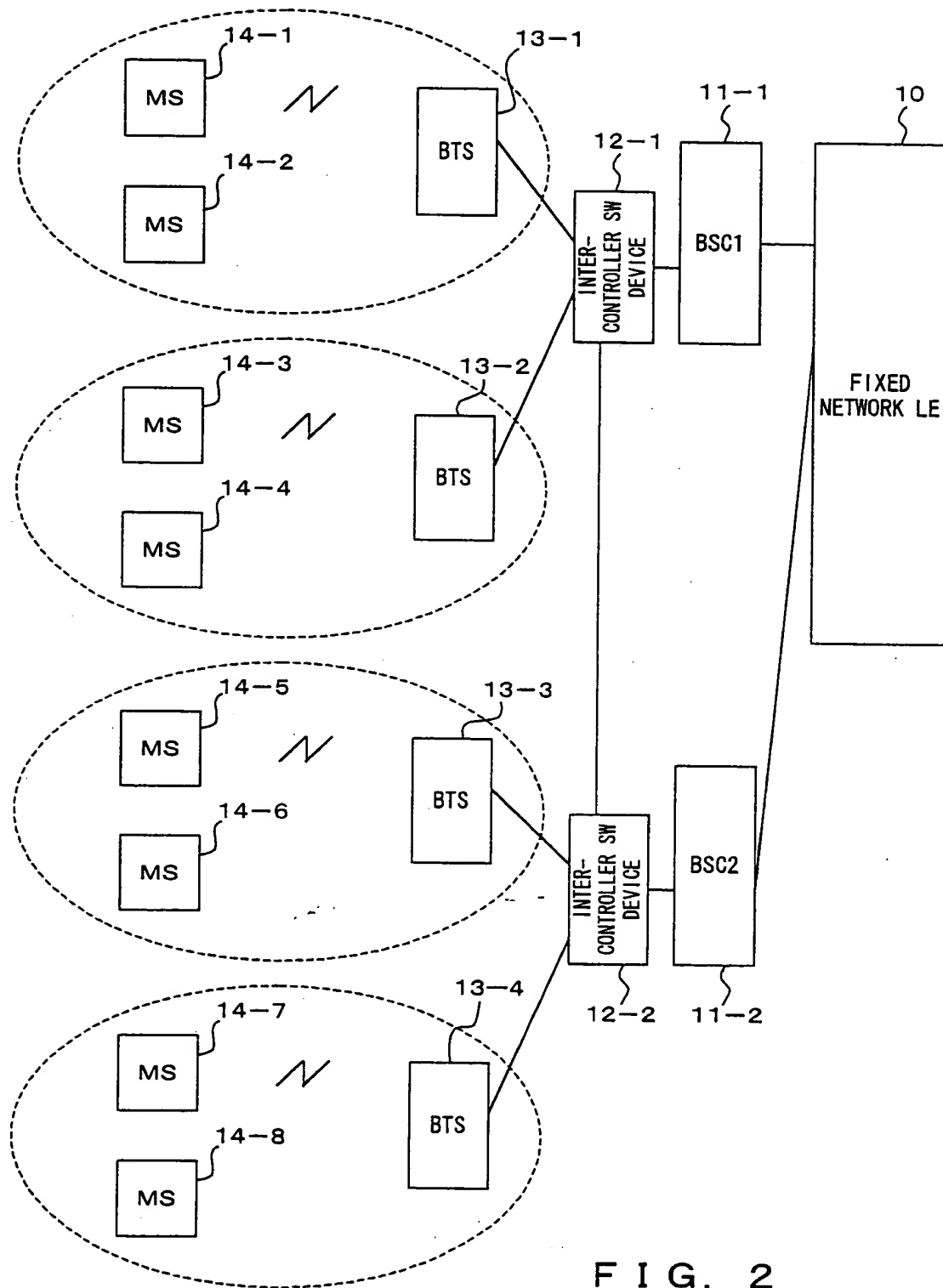


FIG. 2

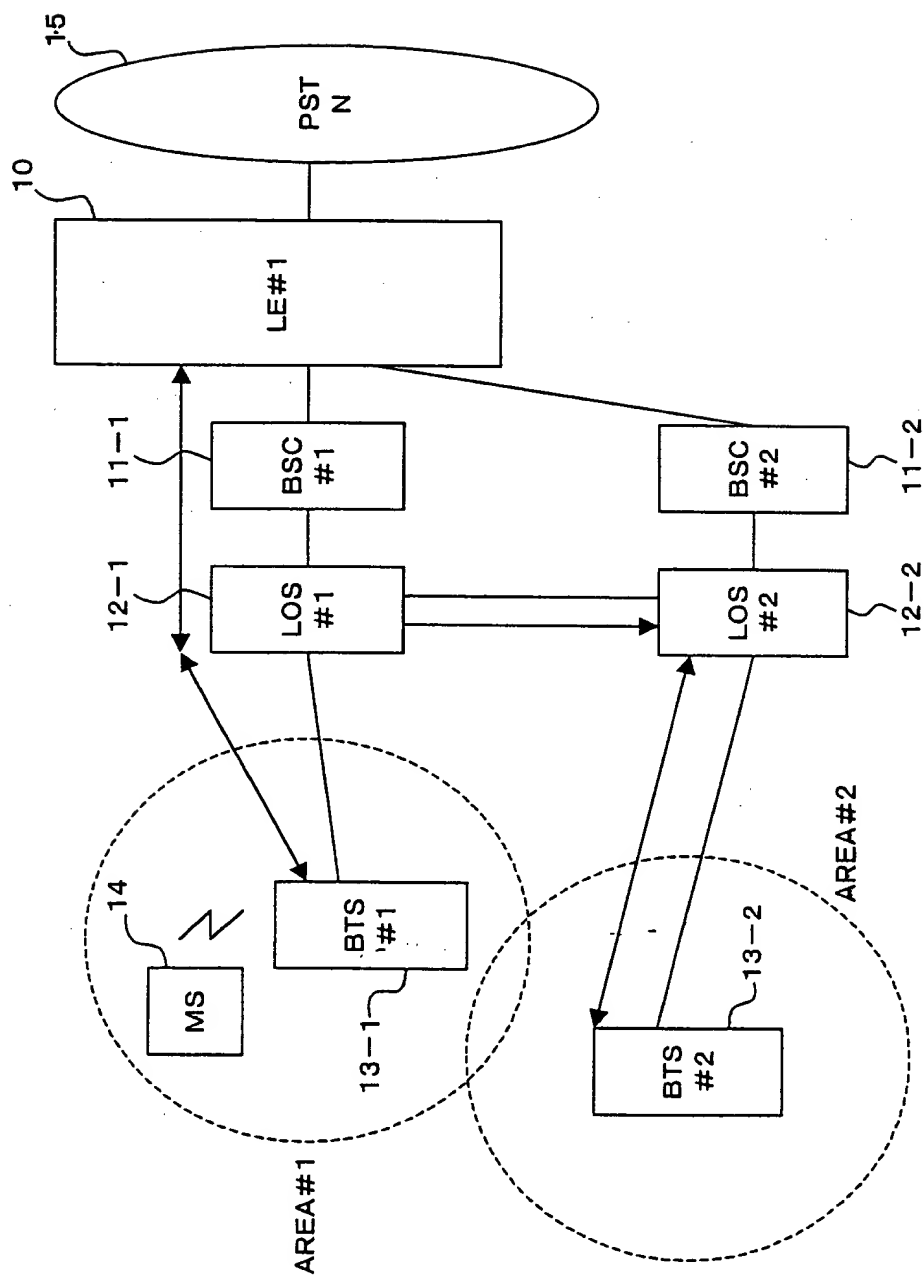


FIG. 3

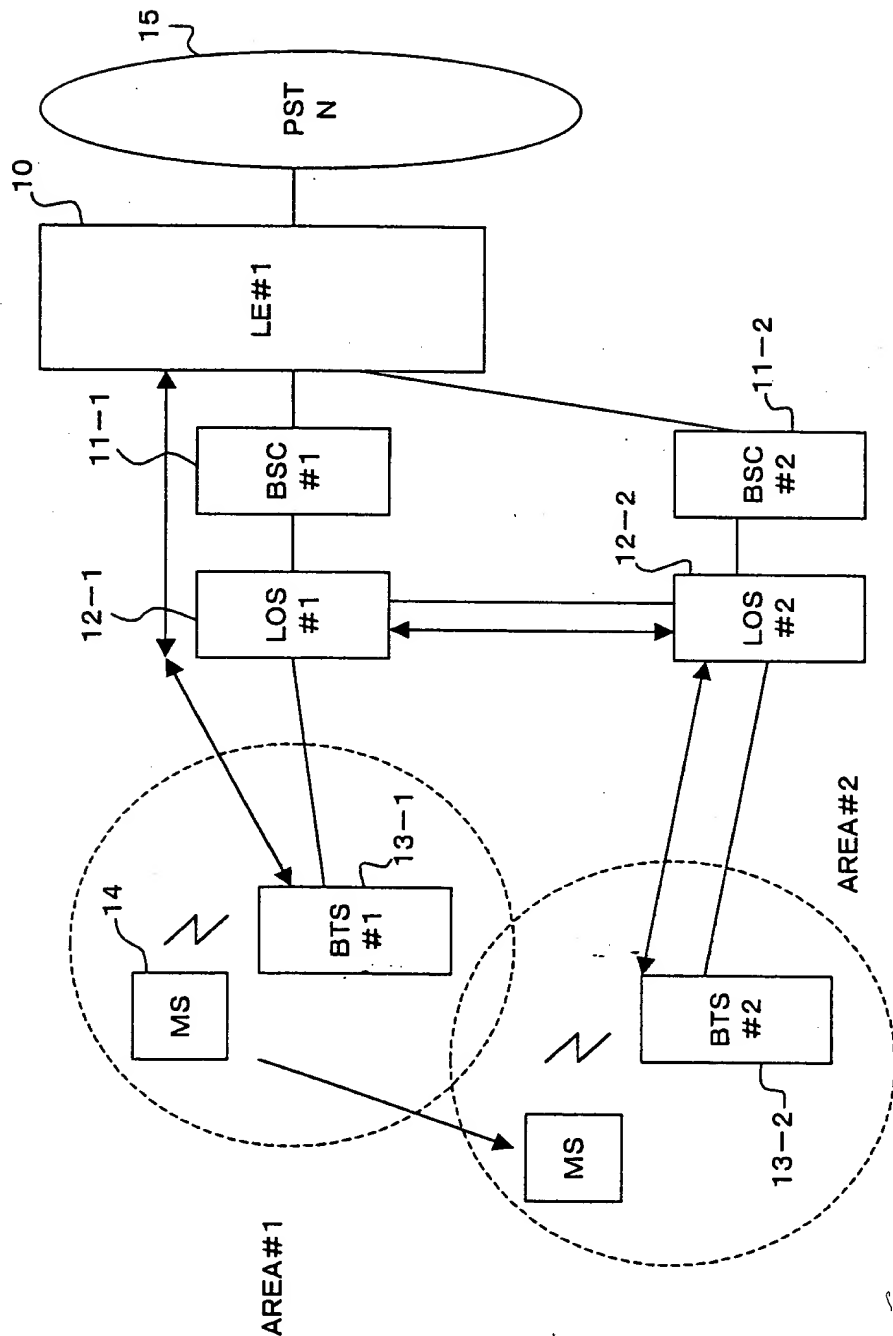


FIG. 4

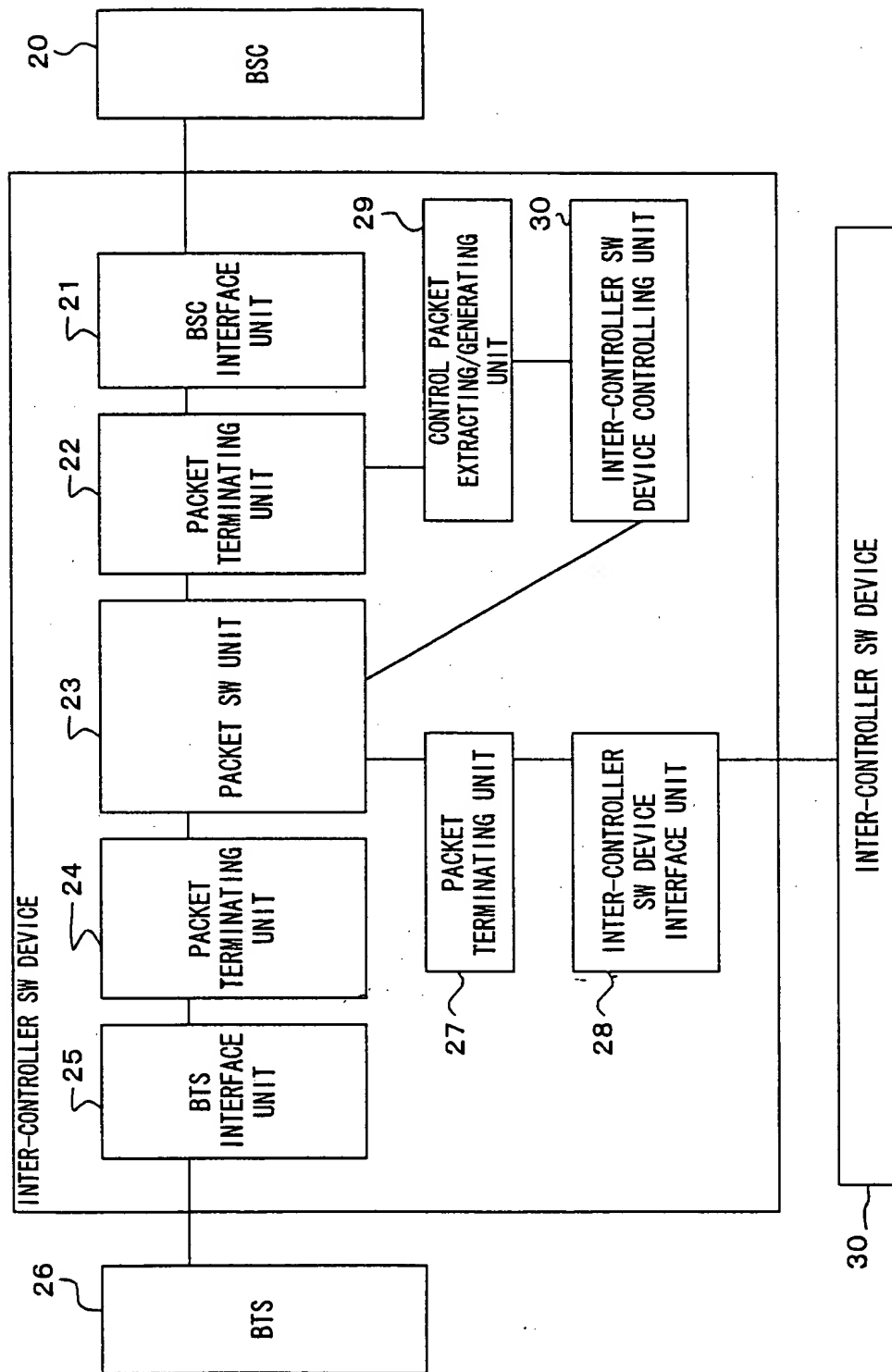


FIG. 5

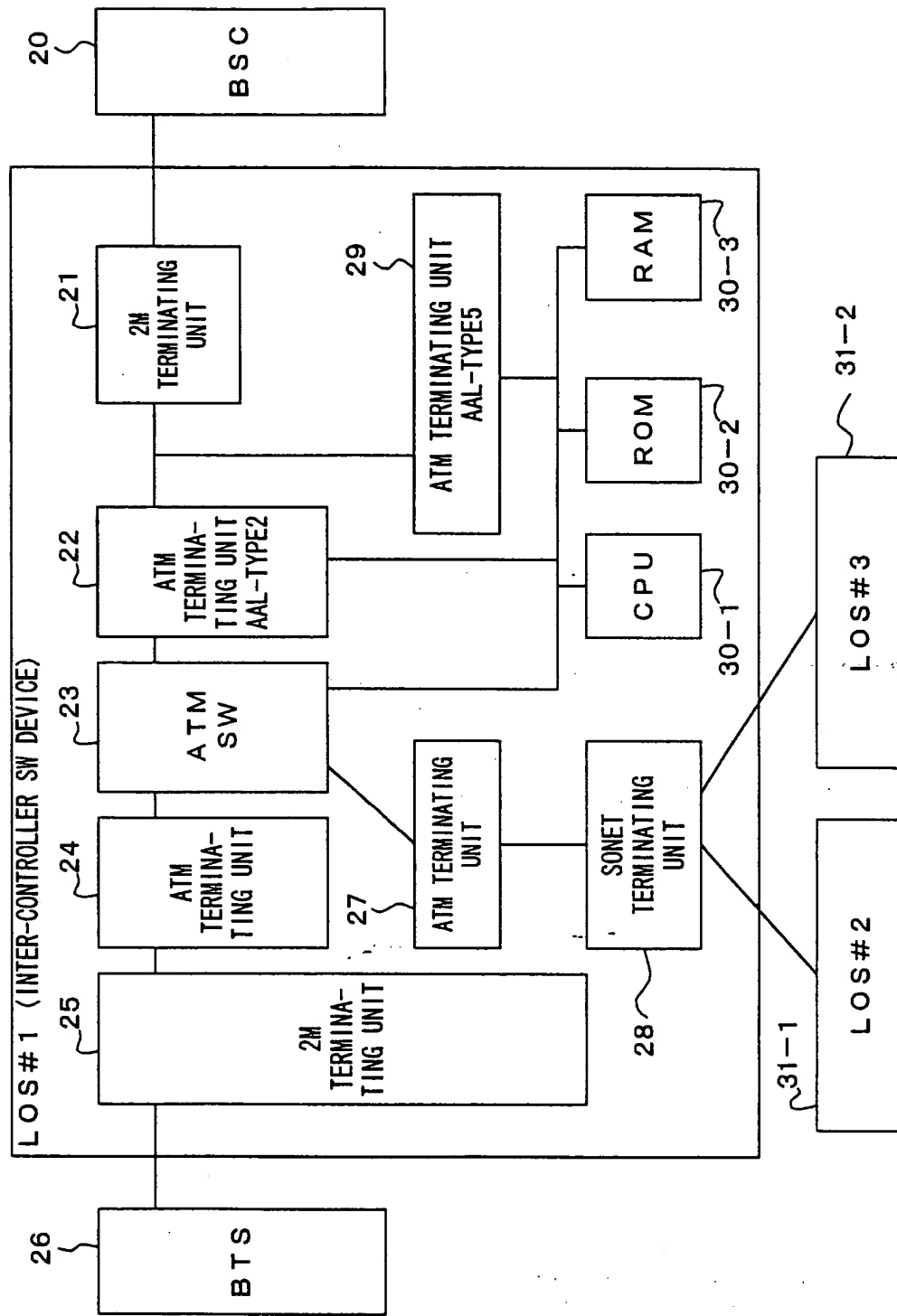


FIG. 6

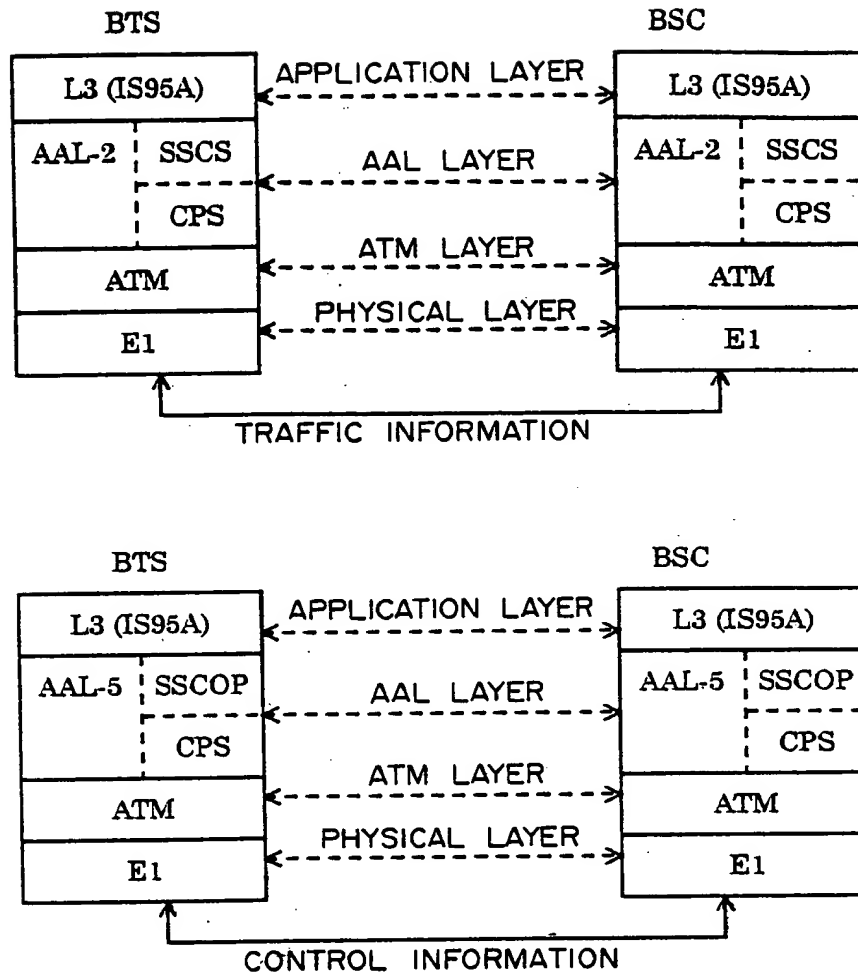


FIG. 7

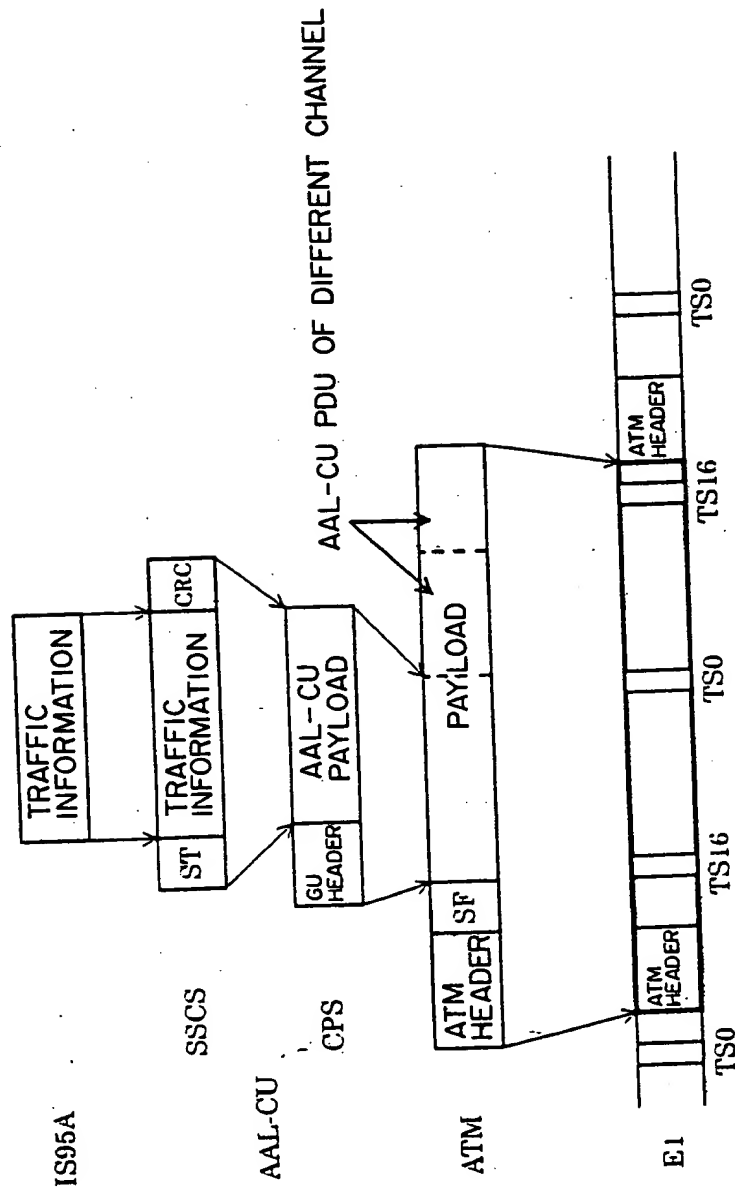


FIG. 8

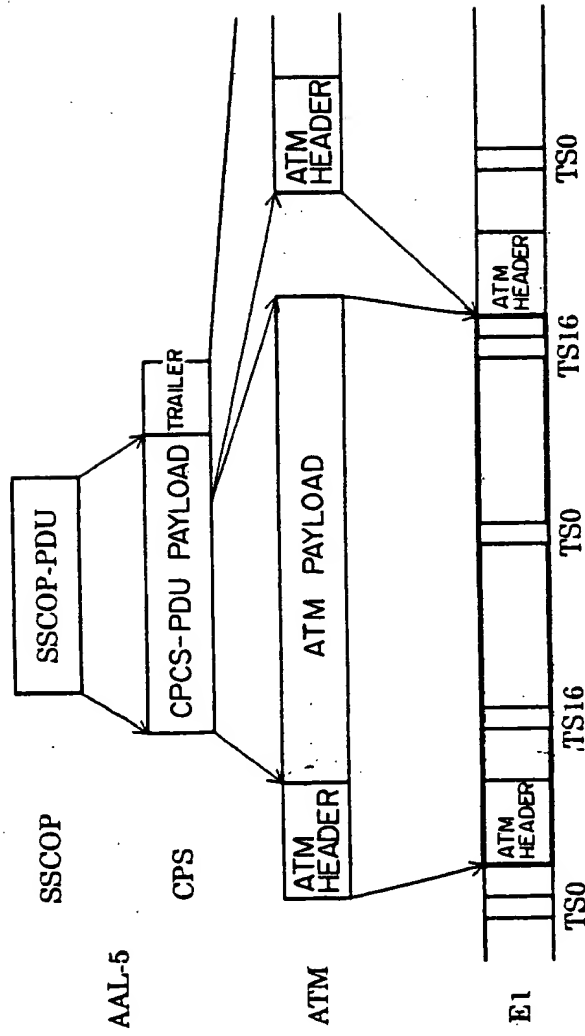


FIG. 9

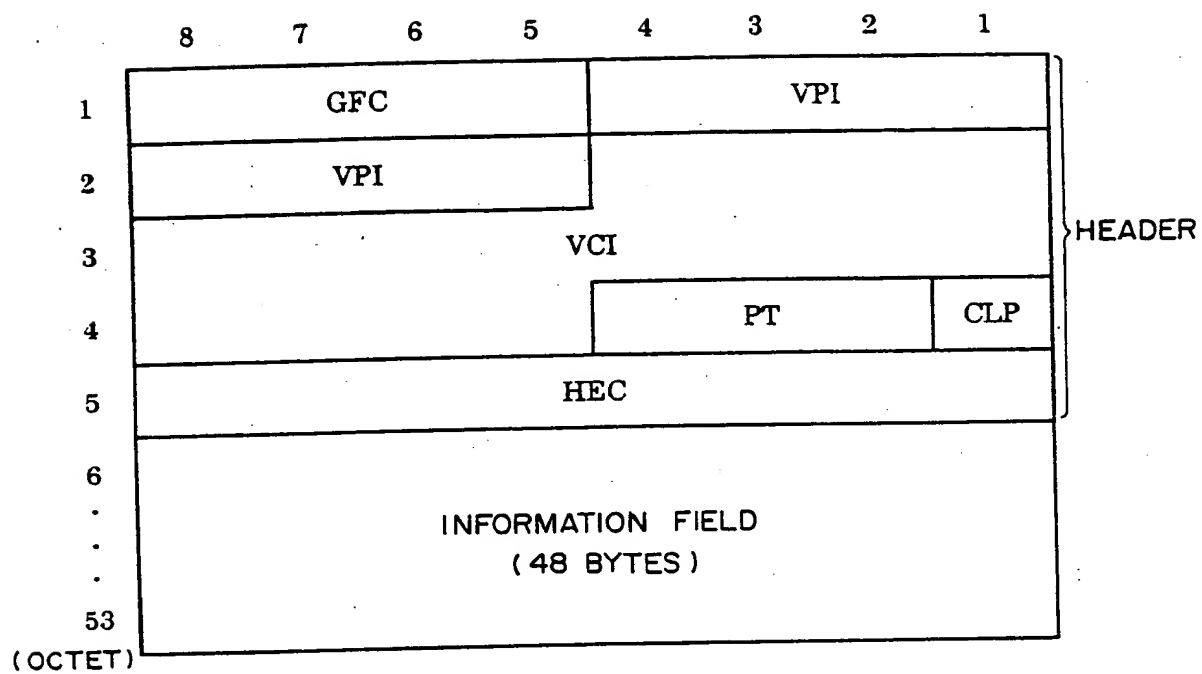


FIG. 10

00040955 55555555

FIELD NAME	CONTENTS
GFC (Generic Flow Control)	FIELD FOR NETWORK TRAFFIC CONTROL IN UNI. SPECIFIC CONTROL IS NOW UNDER STUDY. "0000" IS SET IN THIS SYSTEM.
VCI/VPI (Virtual Patch Identifier /Virtual Channel Identifier)	FIELD FOR SETTING ROUTING INFORMATION OF ATM CELL. TRANSFER PATH IS DETERMINED BY COMBINING VPI AND VCI.
PT (Payload Type)	FIELD FOR INDICATING WHETHER INFORMATION FIELD OF ATM CELL IS EITHER USER OR CONTROL INFORMATION. ALSO USED FOR CONGESTION CONTROL OR ATM LAYER USER DISPLAY.
CLP (Cell Loss Priority)	SET TO "1" FOR CELL WHICH MAY BE PREFERENTIALLY DISCARDED WHEN NETWORK BECOMES CONGESTED. OTHERWISE, SET TO "0". FIXED TO "0" IN THIS SYSTEM.
HEC (Header Error Control)	FIELD FOR SETTING CRC CODE FOR DETECTING ERROR IN ATM HEADER GENERATING POLYNOMIAL IS x^3+x^2+x+1

FIG. 11

09948955.072404
TOTELD"558T660

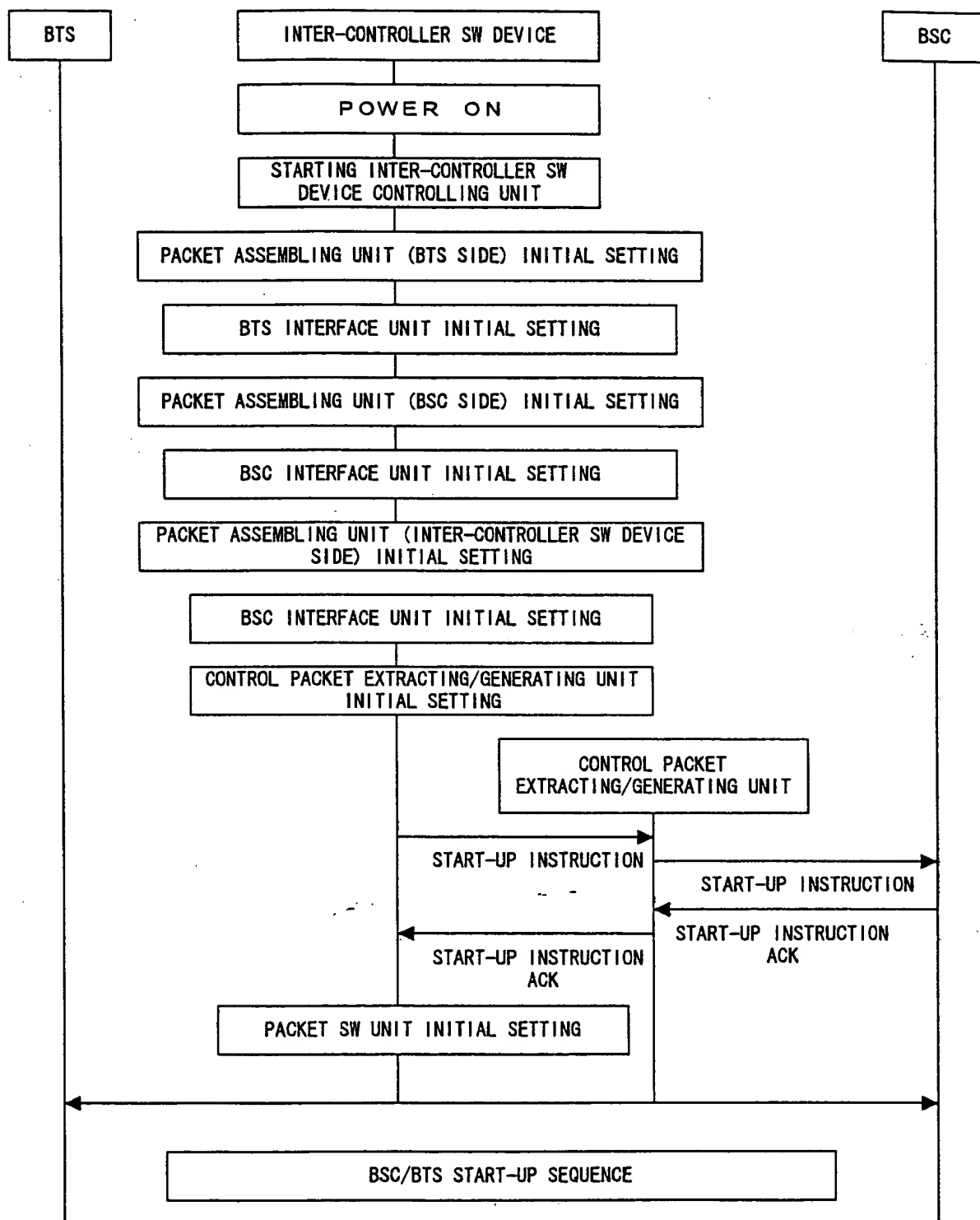


FIG. 12

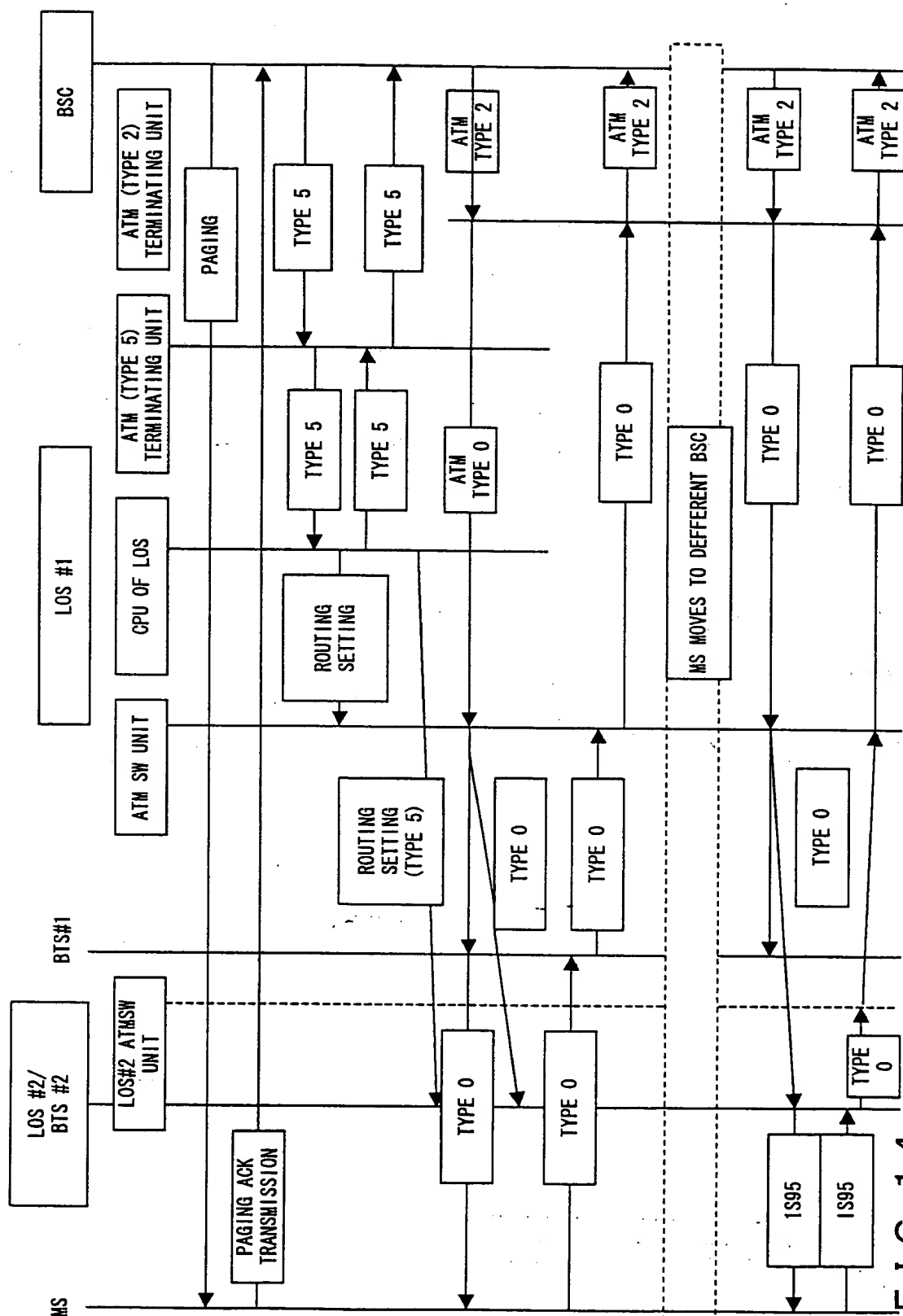


FIG. 14

00040556072404

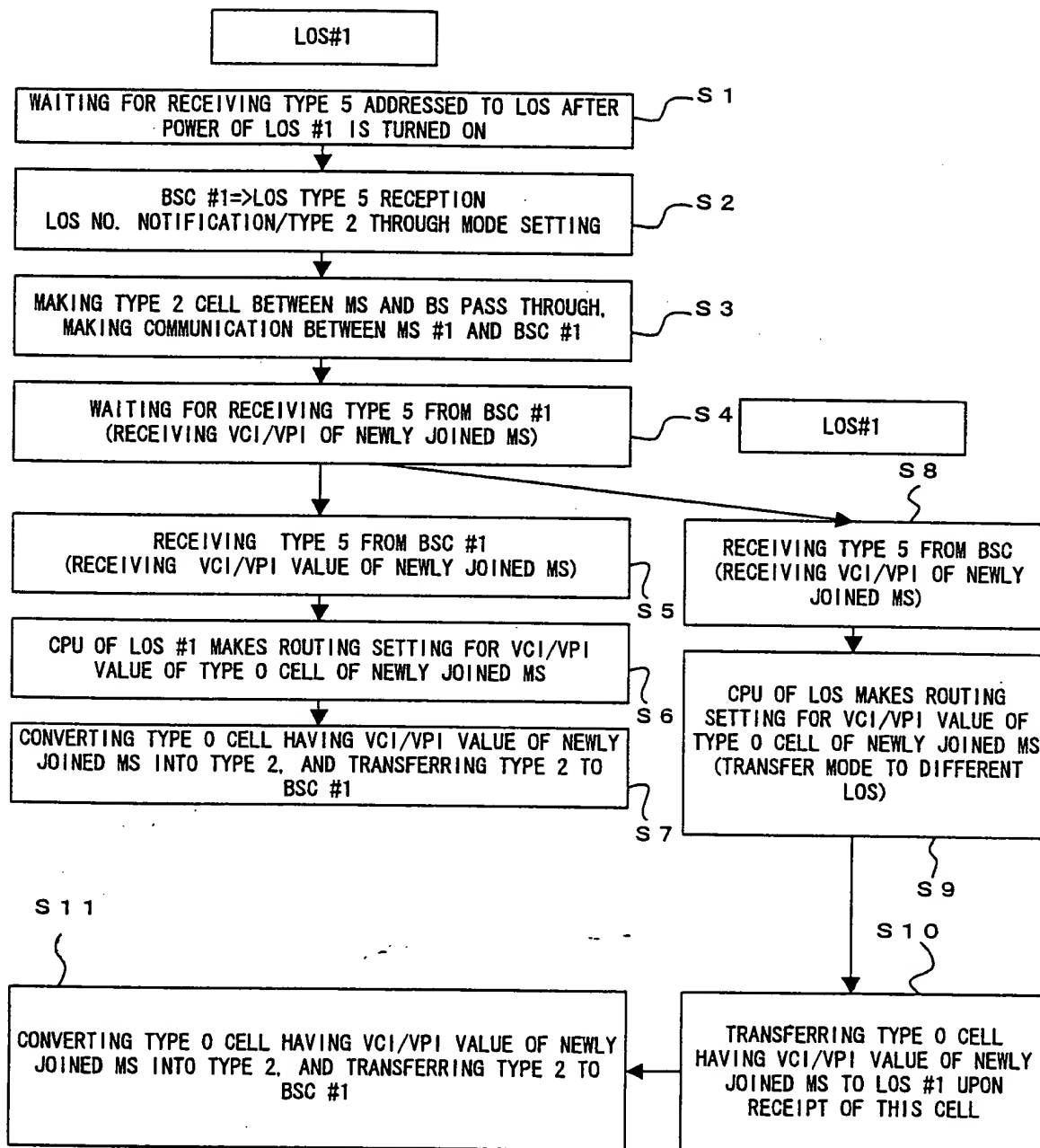


FIG. 15

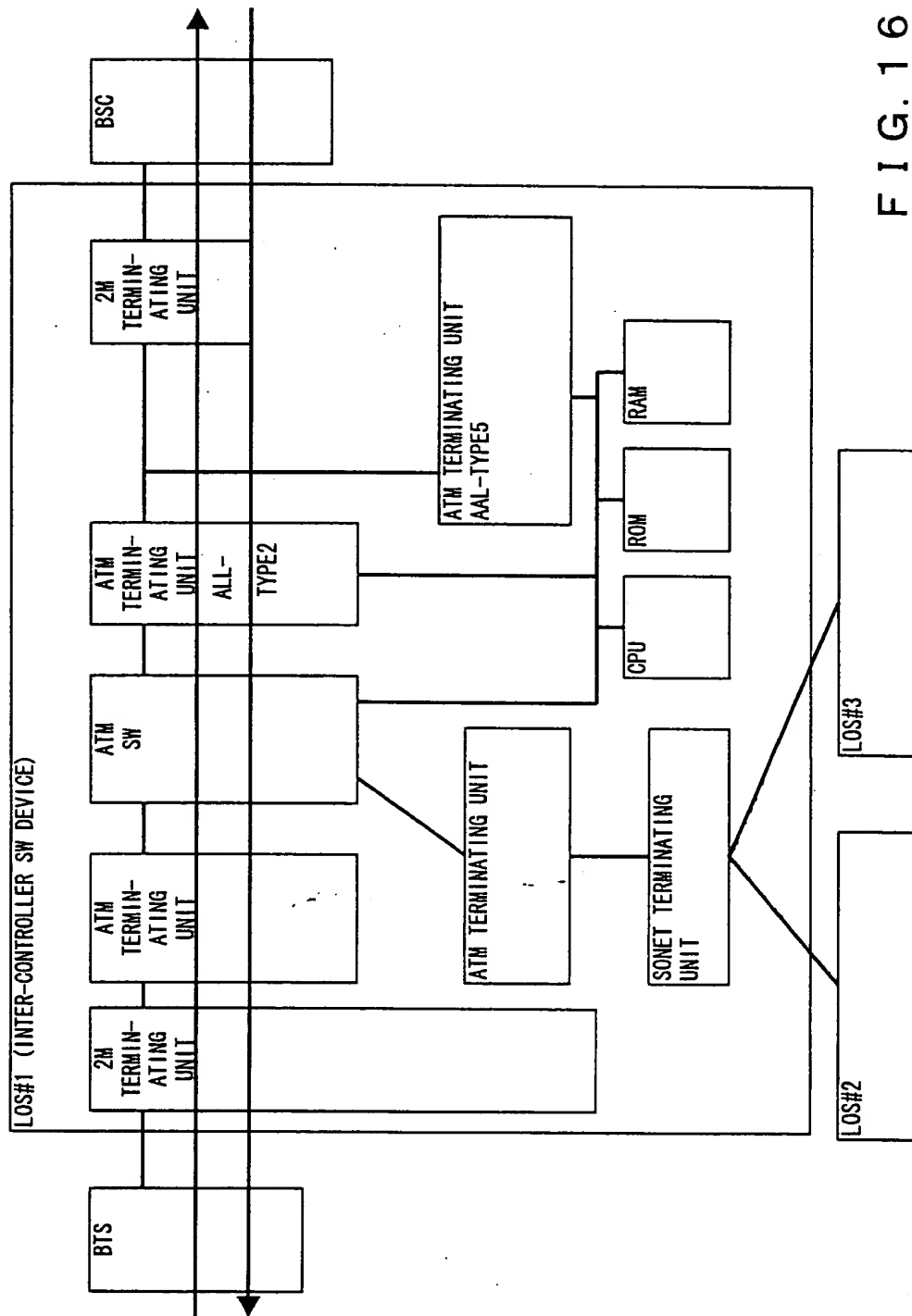


FIG. 16

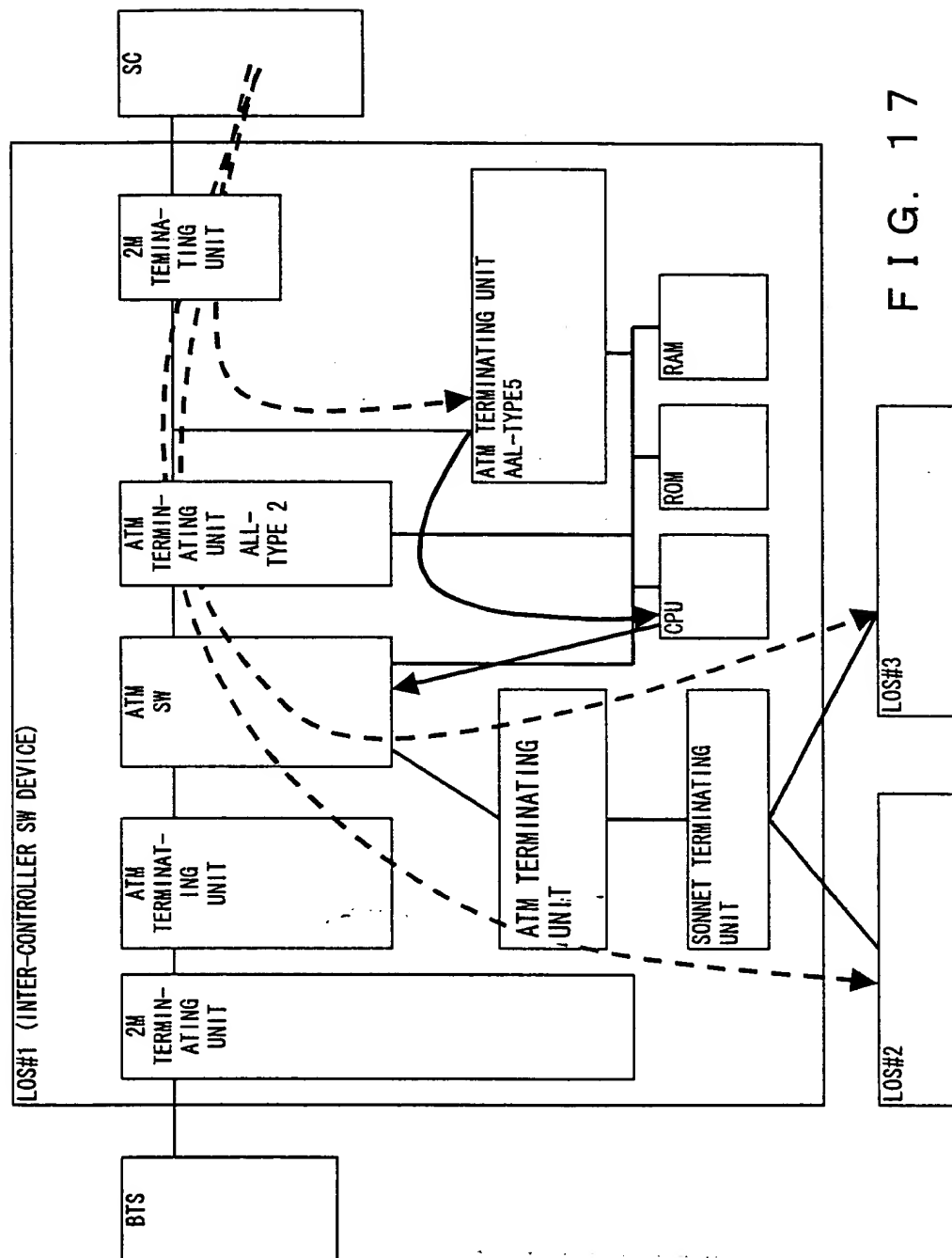


FIG. 17

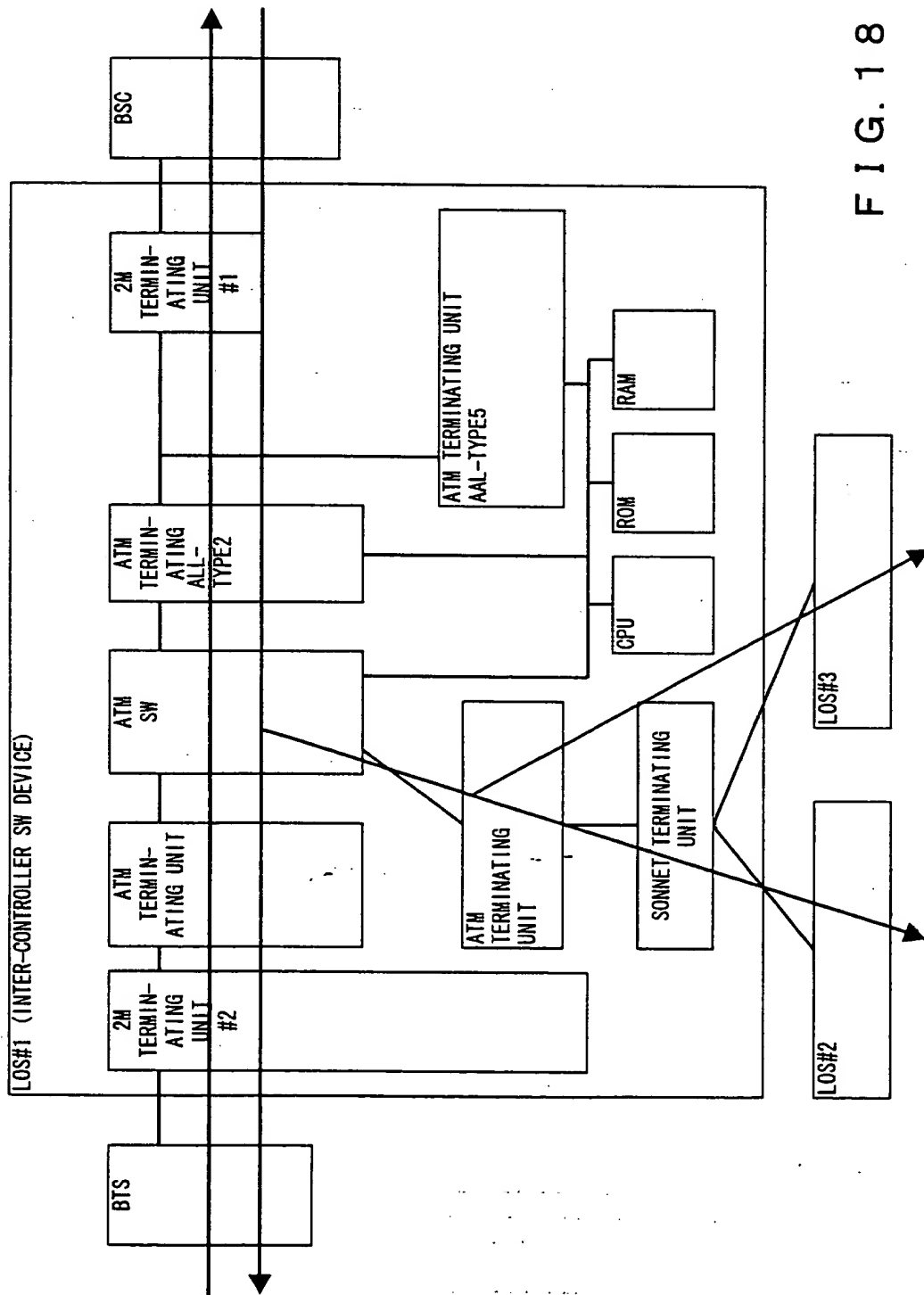


FIG. 18

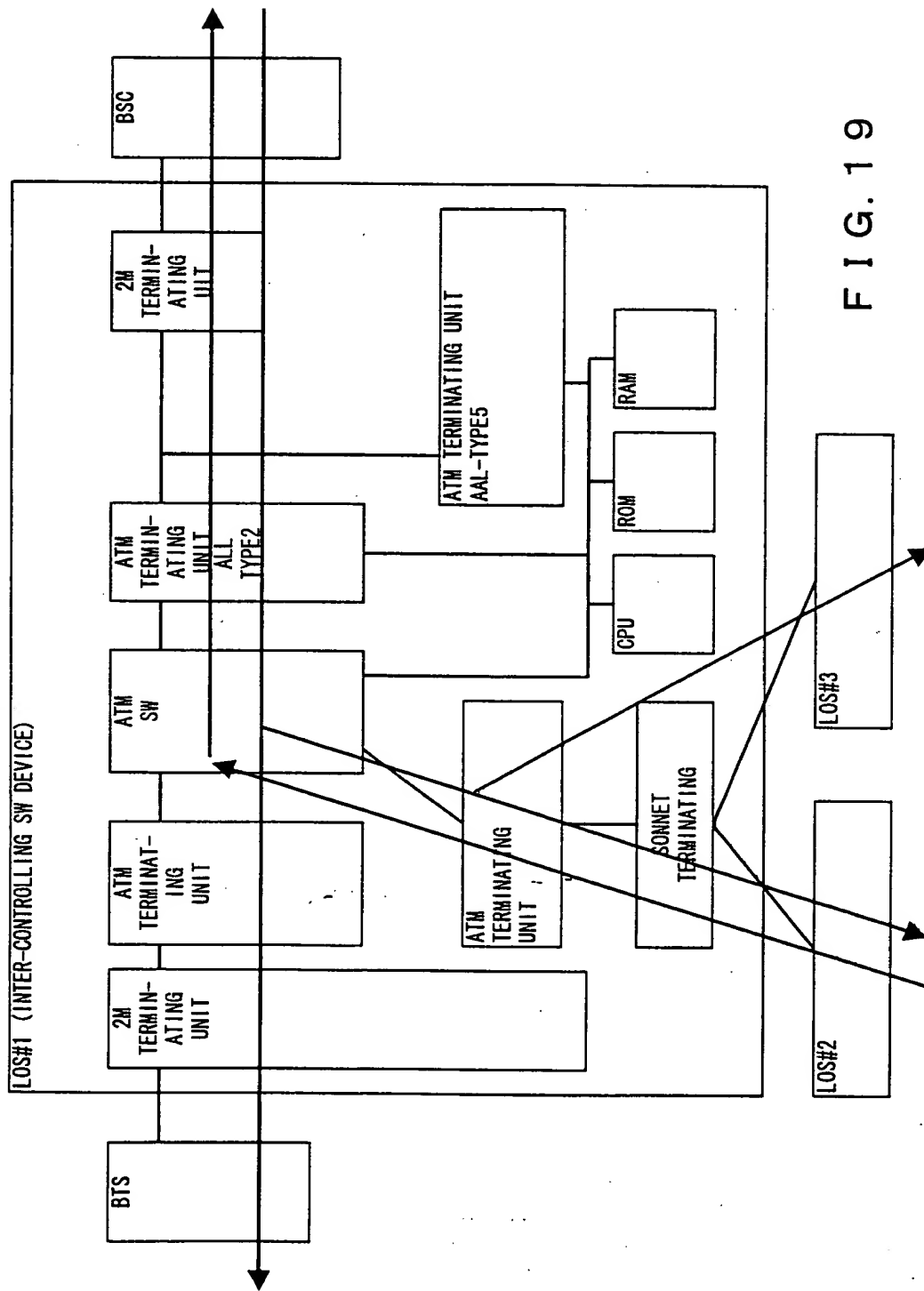


FIG. 19

00018955 073404

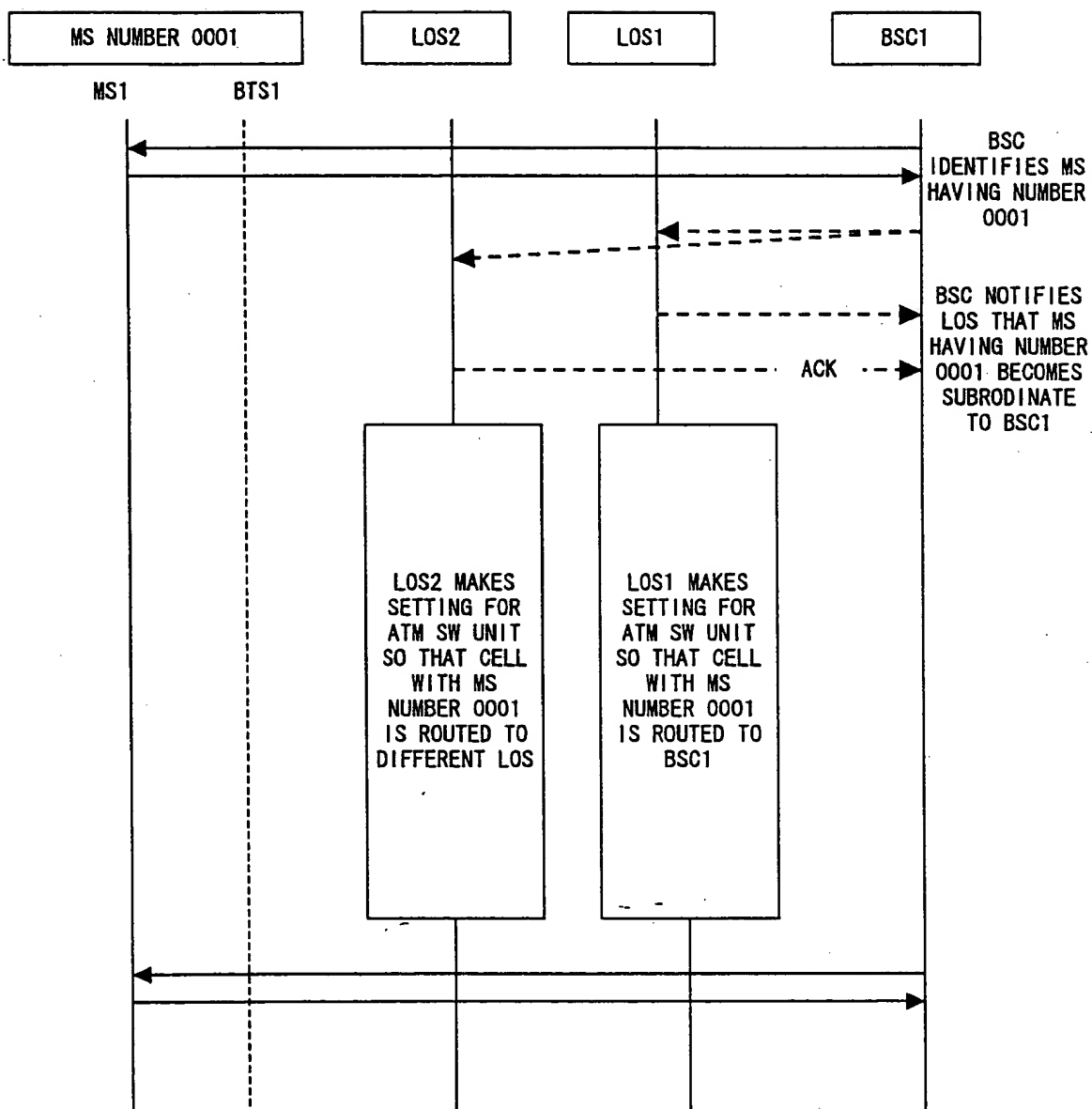


FIG. 20

0004055.072404
T0720 550460

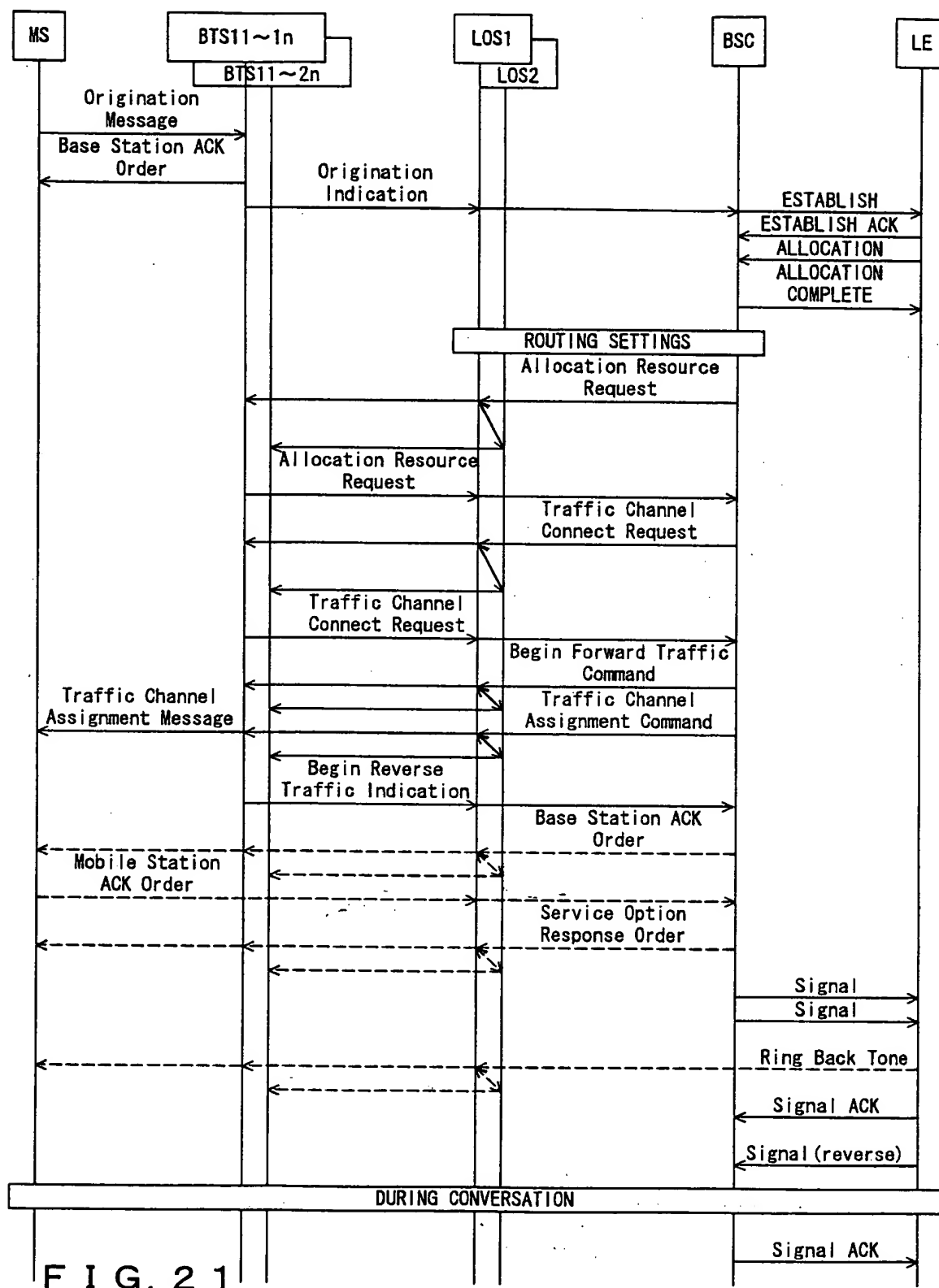
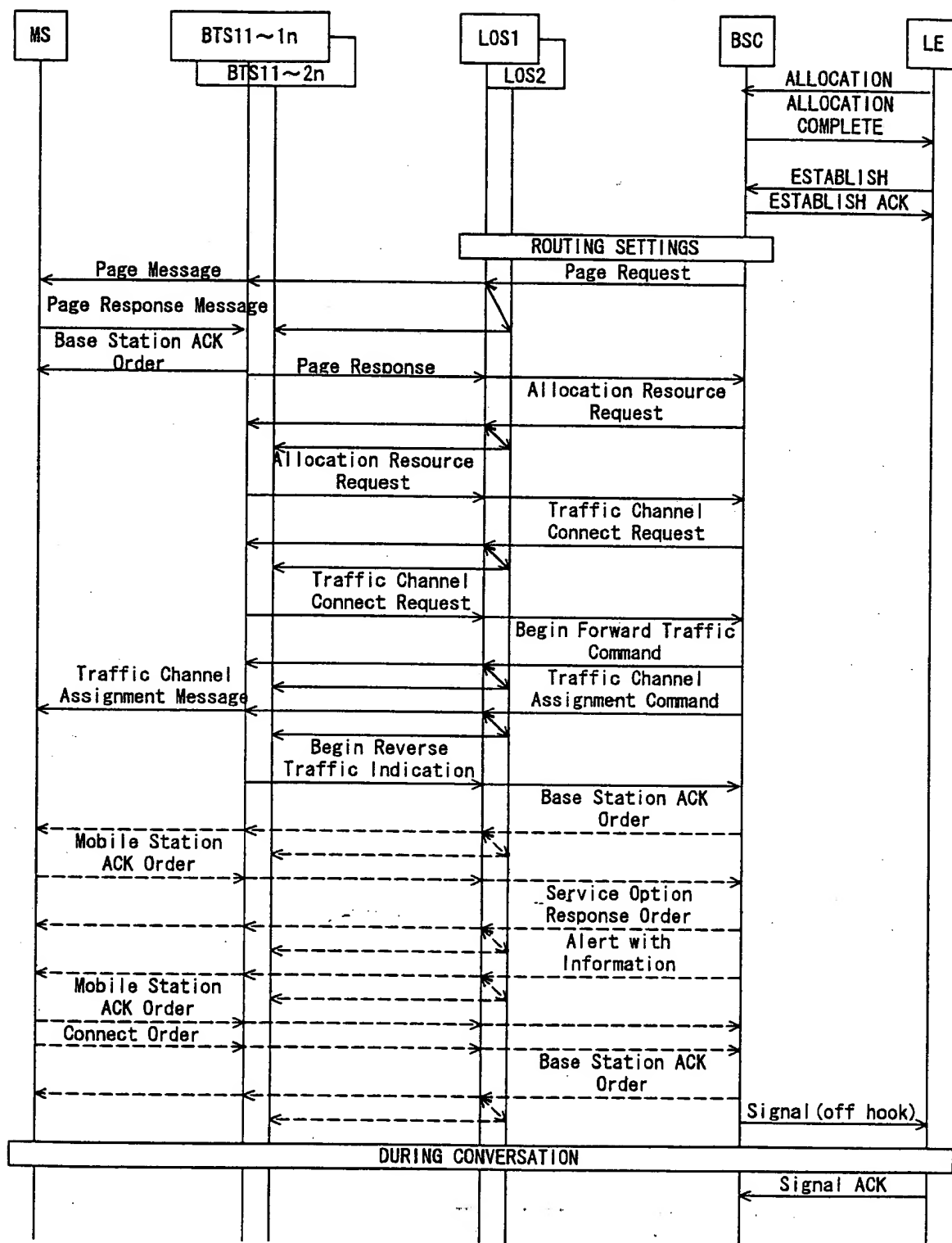


FIG. 21

00010055-0740
00020055-0740



F I G . 2 2

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sequenceDiagram
    participant MS
    participant BTS as BTS11~1n
    participant LOS as LOS1
    participant BSC
    participant LE

    MS->>BTS: Origination Message
    BTS->>LOS: Origination Indication
    LOS->>BSC: Allocation Resource Request
    BSC->>LOS: ESTABLISH
    LOS->>BSC: ESTABLISH ACK
    BSC->>LOS: ALLOCATION
    BSC->>LOS: ALLOCATION COMPLETE
    LOS->>BTS: Traffic Channel Connect Request
    BTS->>LOS: Traffic Channel Connect Response
    LOS->>BSC: Begin Forward Traffic Command
    BSC->>LOS: Traffic Channel Assignment Command
    BSC->>LOS: Base Station ACK Order
    LOS->>MS: Mobile Station ACK Order
    MS->>LOS: Service Option Response Order
    LOS->>BSC: Ring Back Tone
    BSC->>LOS: Signal ACK
    LOS->>MS: Signal (reverse)
    Note over MS, LOS, BSC, LE: DURING CONVERSATION
    Note over BSC, LE: Signal ACK
  
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0004955 "072404
T072404" 55684600

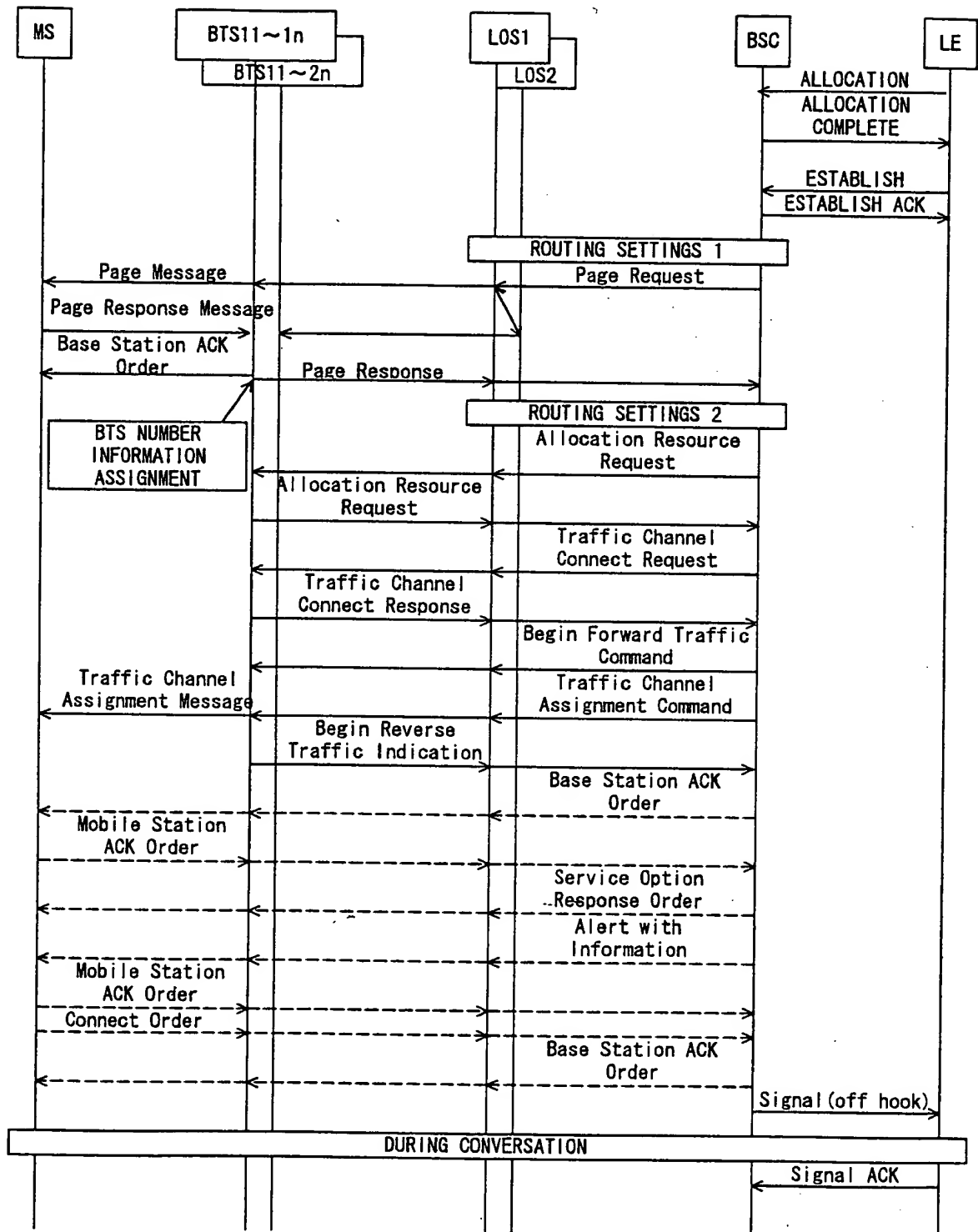


FIG. 24

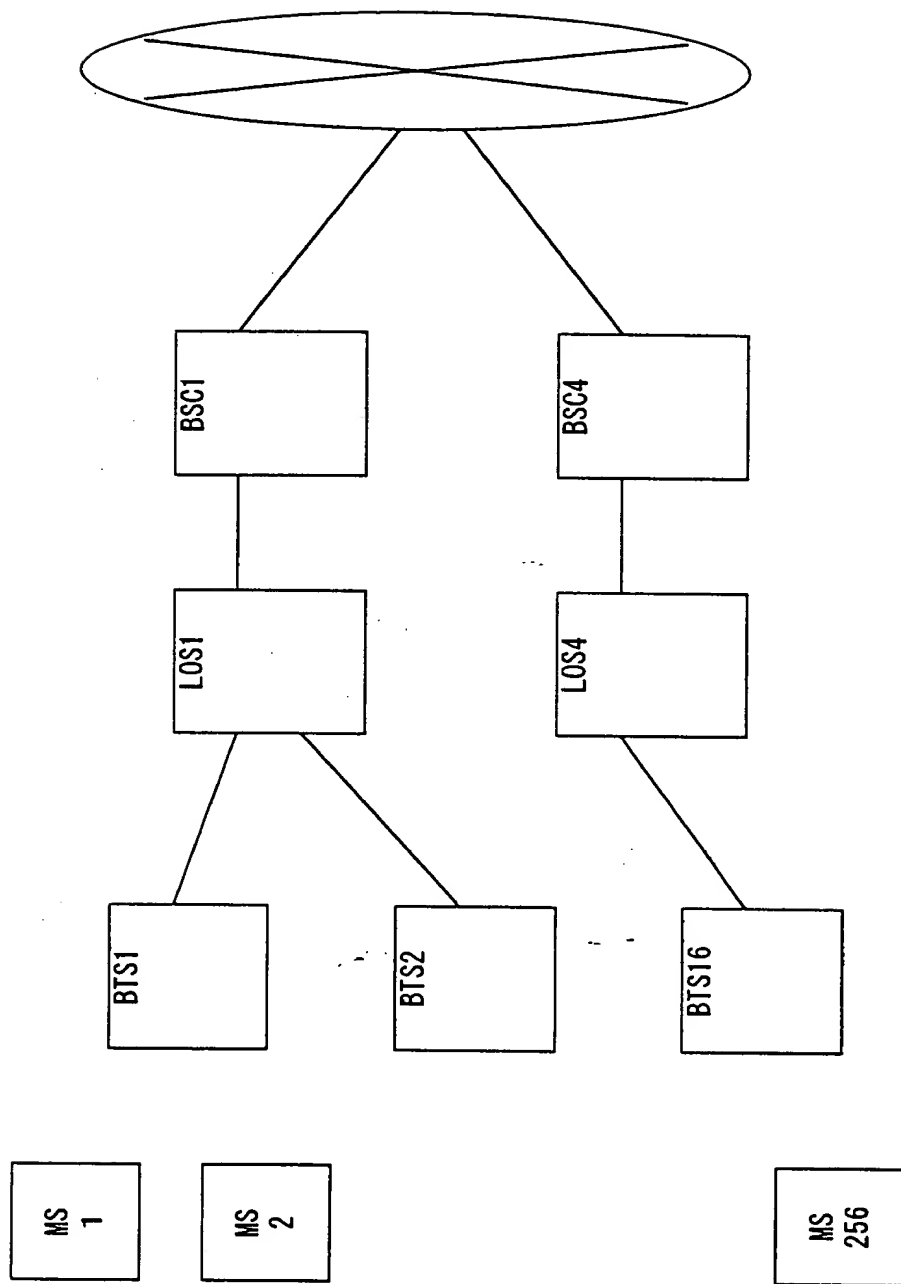


FIG. 25

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sequenceDiagram
    participant MS
    participant BTS11_1n as BTS11~1n
    participant BTS11_2n as BTS11~2n
    participant LOS1
    participant LOS2
    participant BSC1
    participant BSC2
    participant LE

    Note over MS, BTS11_1n, BTS11_2n, LOS1, LOS2, BSC1, BSC2, LE: DURING COMMUNICATION WITH BTS1

    MS->>BTS11_1n: Pilot Strength Measurement
    Note over MS: Pilot Strength OF BTS10 EXCEEDS THRESHOLD FOR Hand-off
    Note over MS: STARTING BTS10 TRAFFIC TRANSMISSION
    BSC1->>BSC2: Handoff Resource Request
    BSC2->>BSC1: Handoff Resource Response
    BSC1->>BTS11_2n: Traffic Channel Connect Request
    BSC2->>BTS11_2n: Traffic Channel Connect Response
    BSC1->>BSC2: Begin Forward Traffic Command
    Note over BSC1, BSC2: STARTING Traffic TRANSMISSION ON Forward Traffic Channel
    BSC2->>BSC1: Handoff Direction
    BSC1->>MS: Handoff Completion Message
    Note over MS: ACQUIRING BTS10 (STARTING TO USE BTS1 AND BTS10)

    Note over MS, BTS11_1n, BTS11_2n, LOS1, LOS2, BSC1, BSC2, LE: DURING COMMUNICATION WITH BTS1 AND BTS10
    
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(CONTINUED TO NEXT)

FIG. 26

FIG. 27

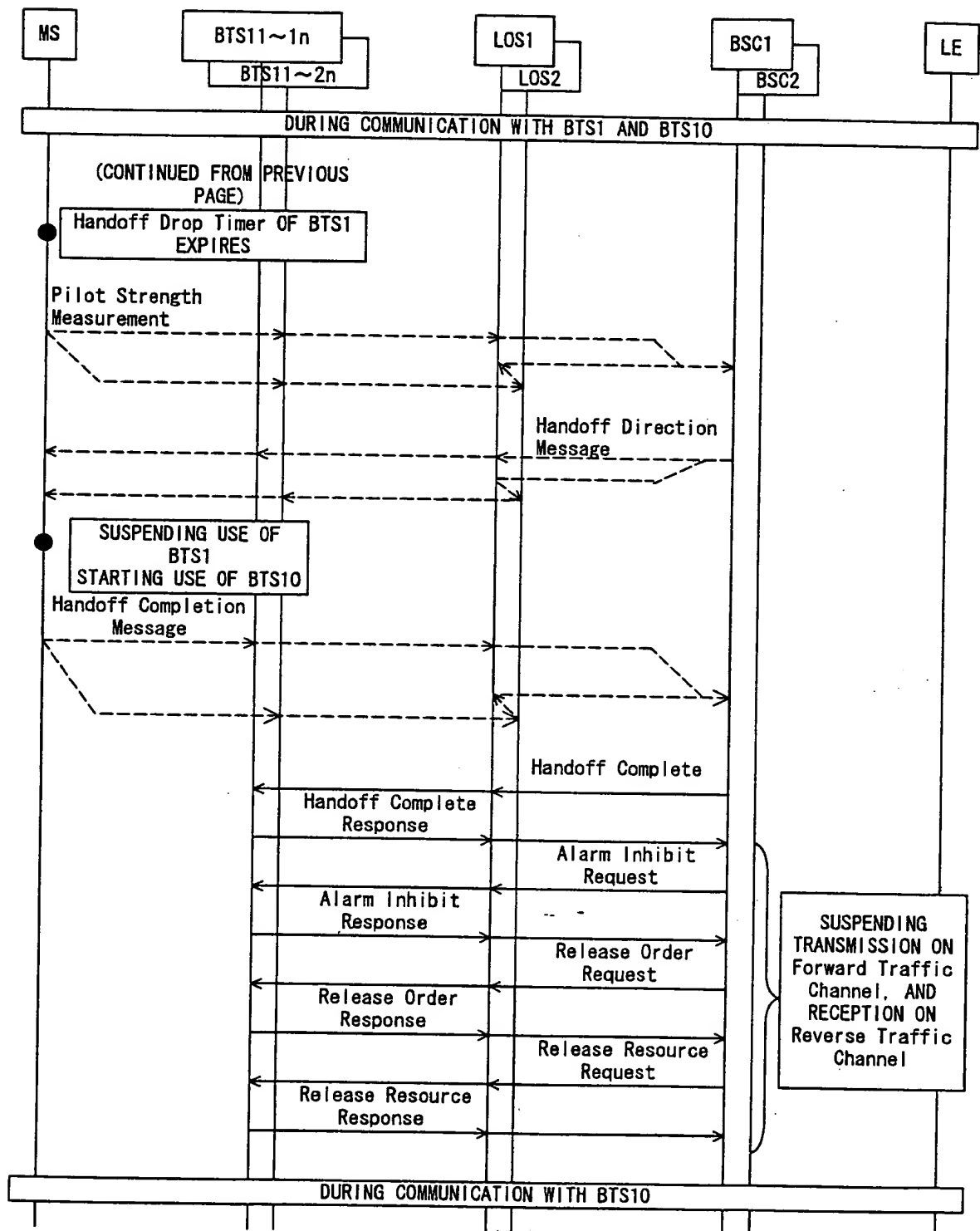


FIG. 27

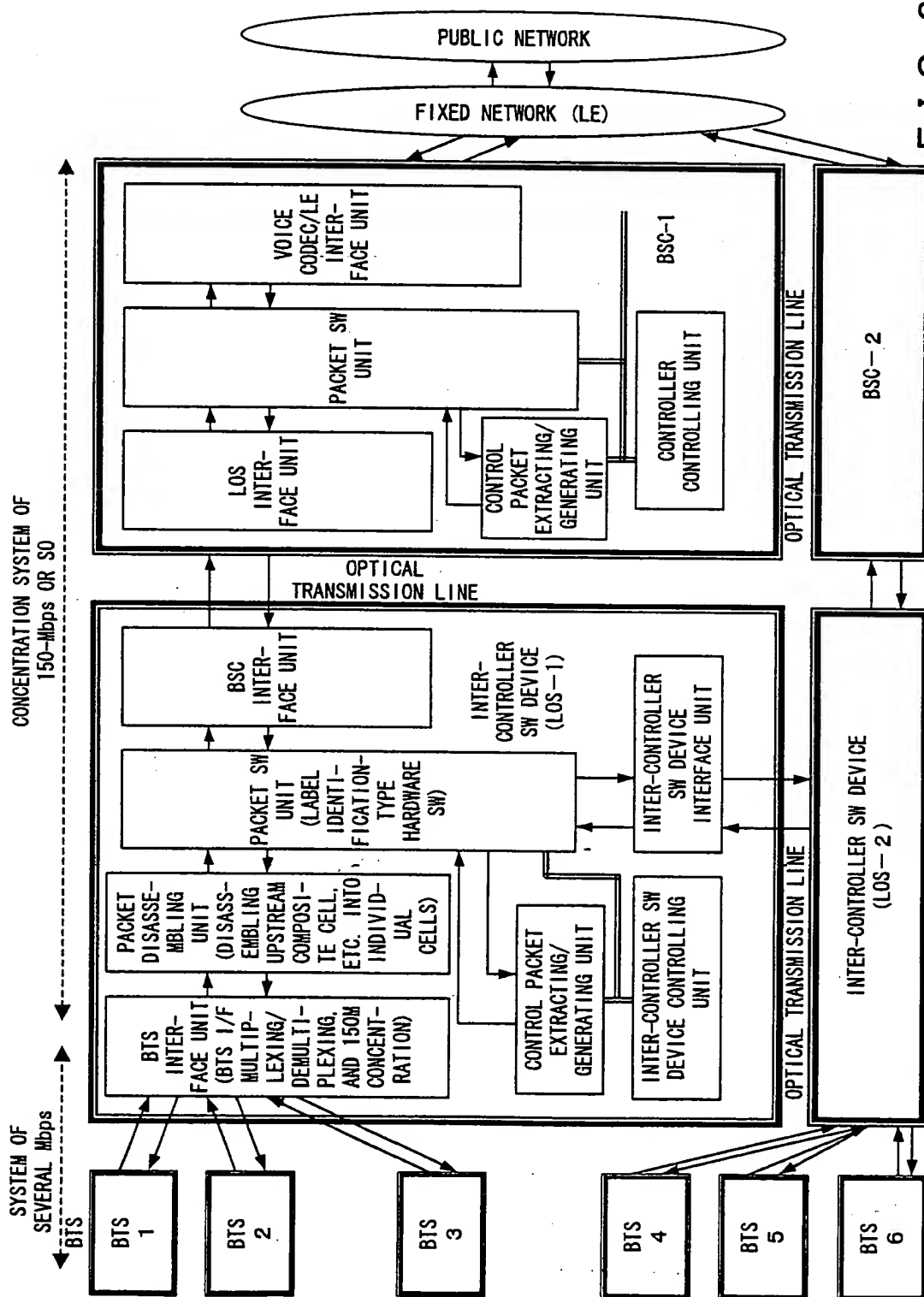
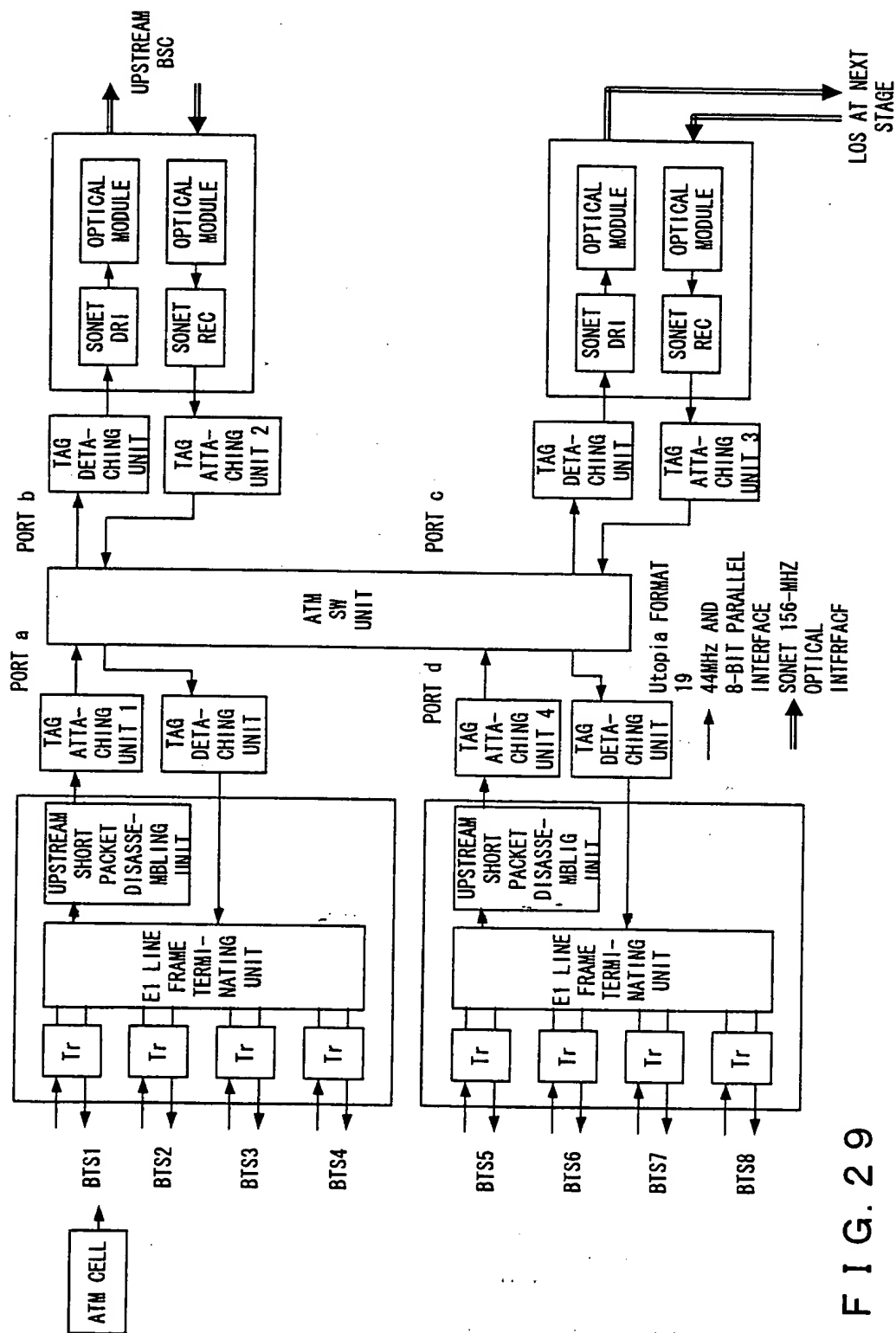
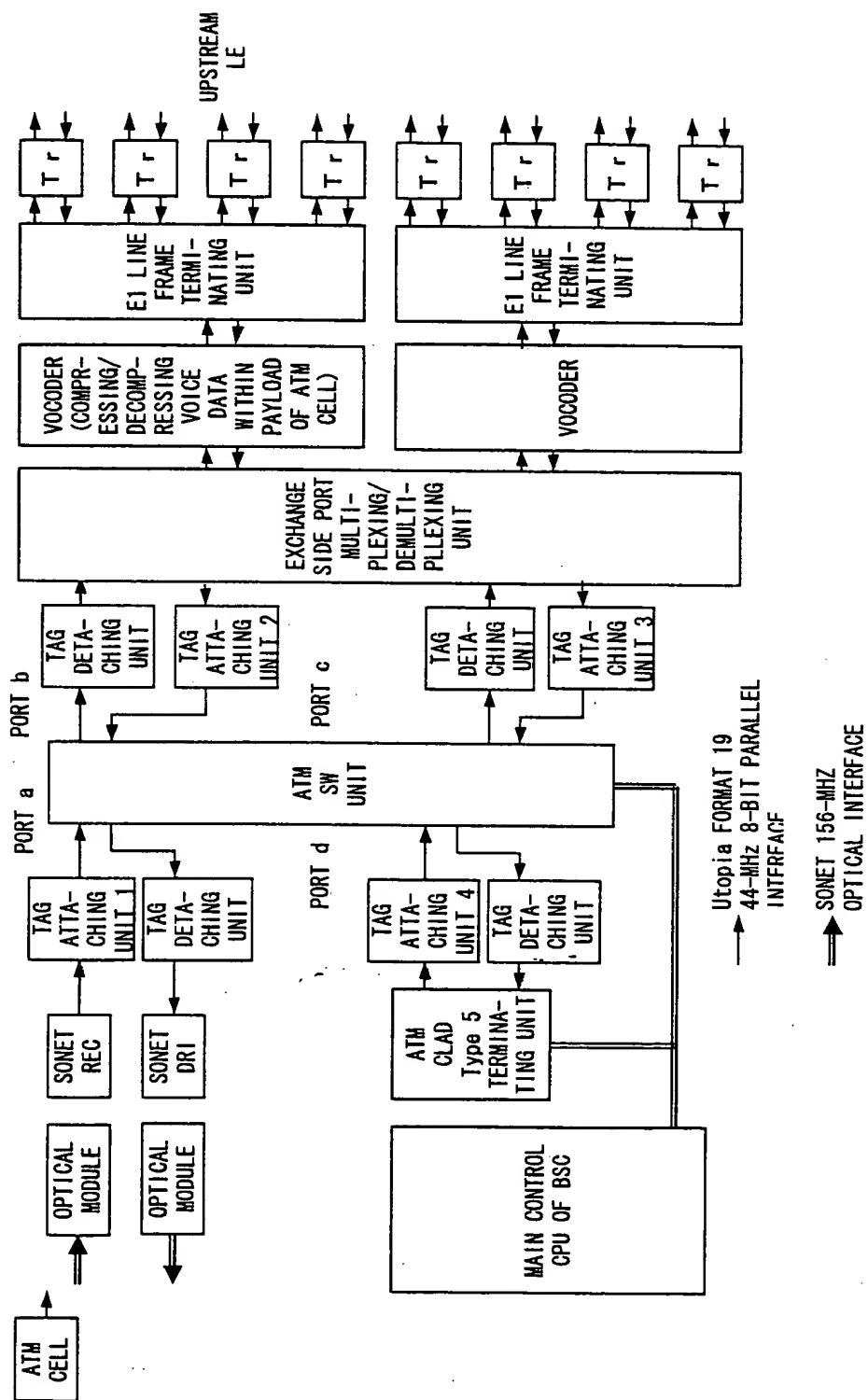


FIG. 28





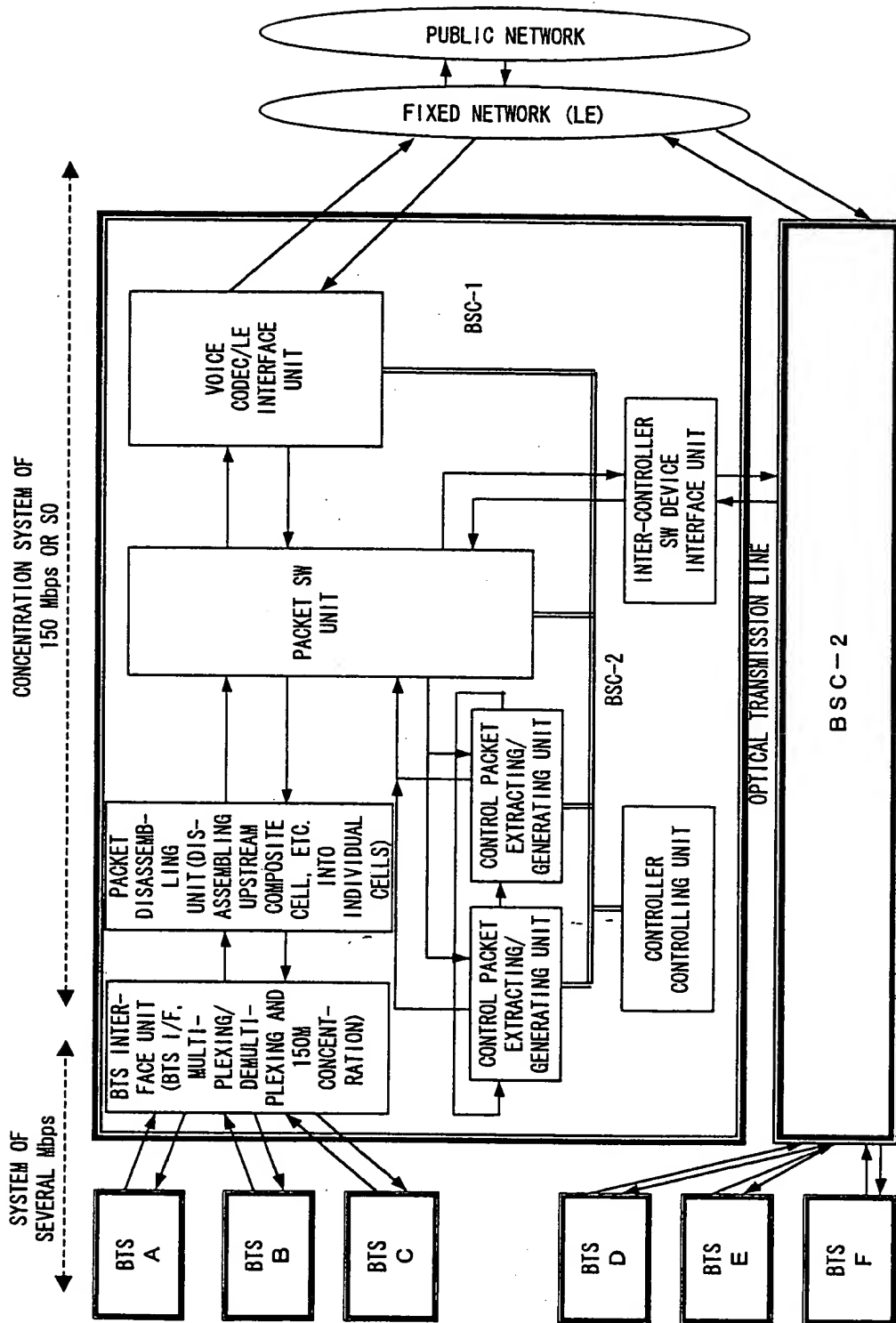


FIG. 31

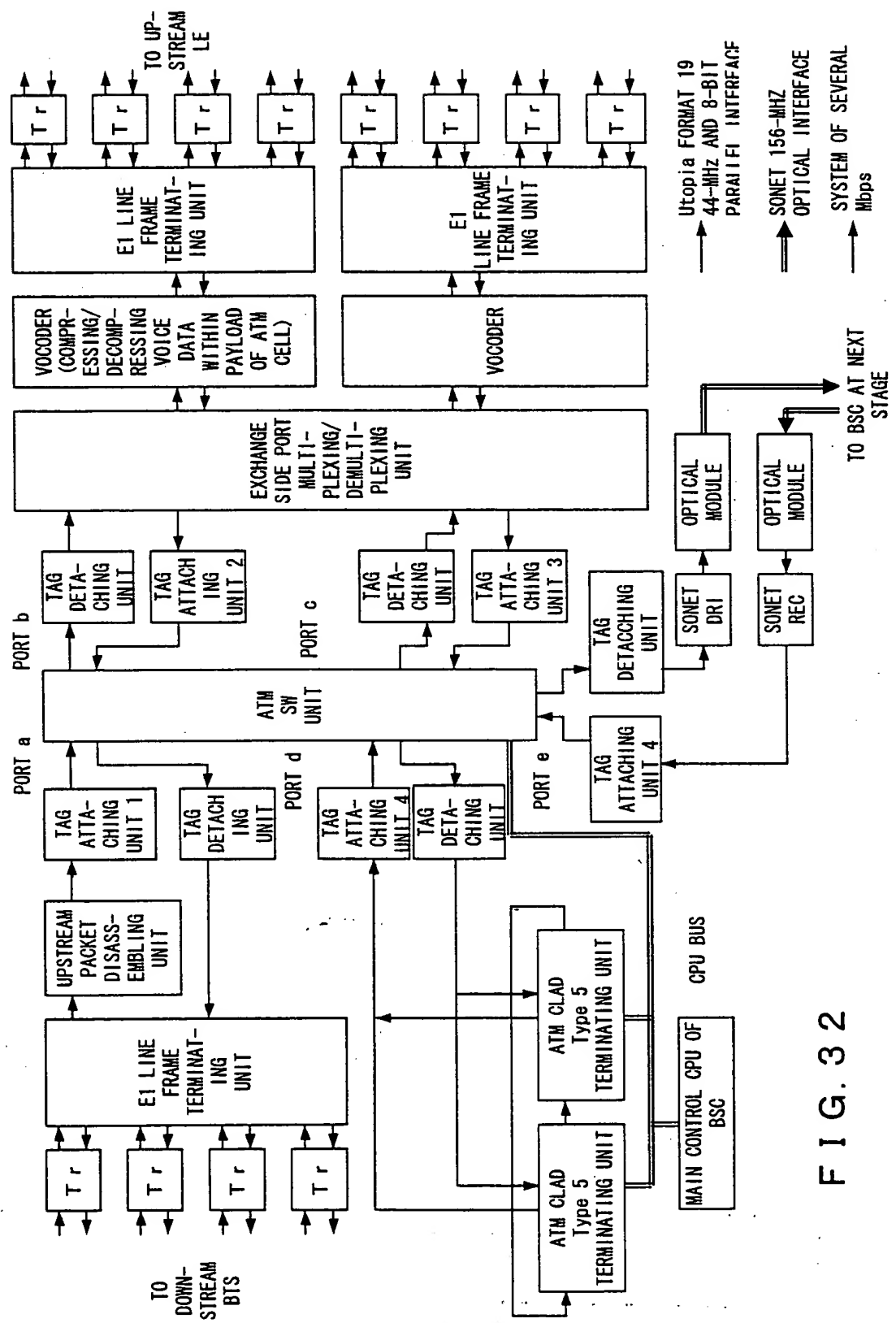


FIG. 32

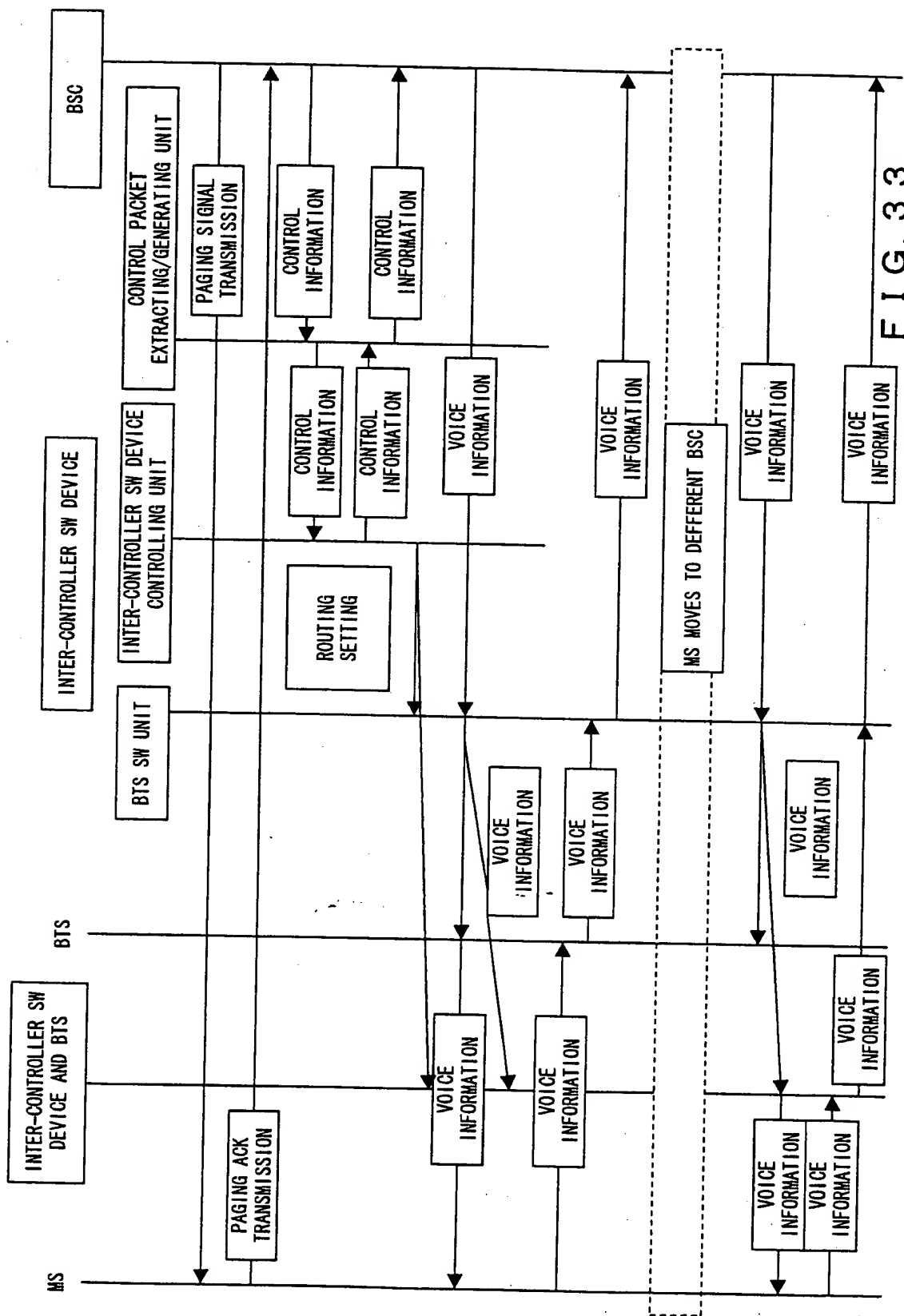


FIG. 33

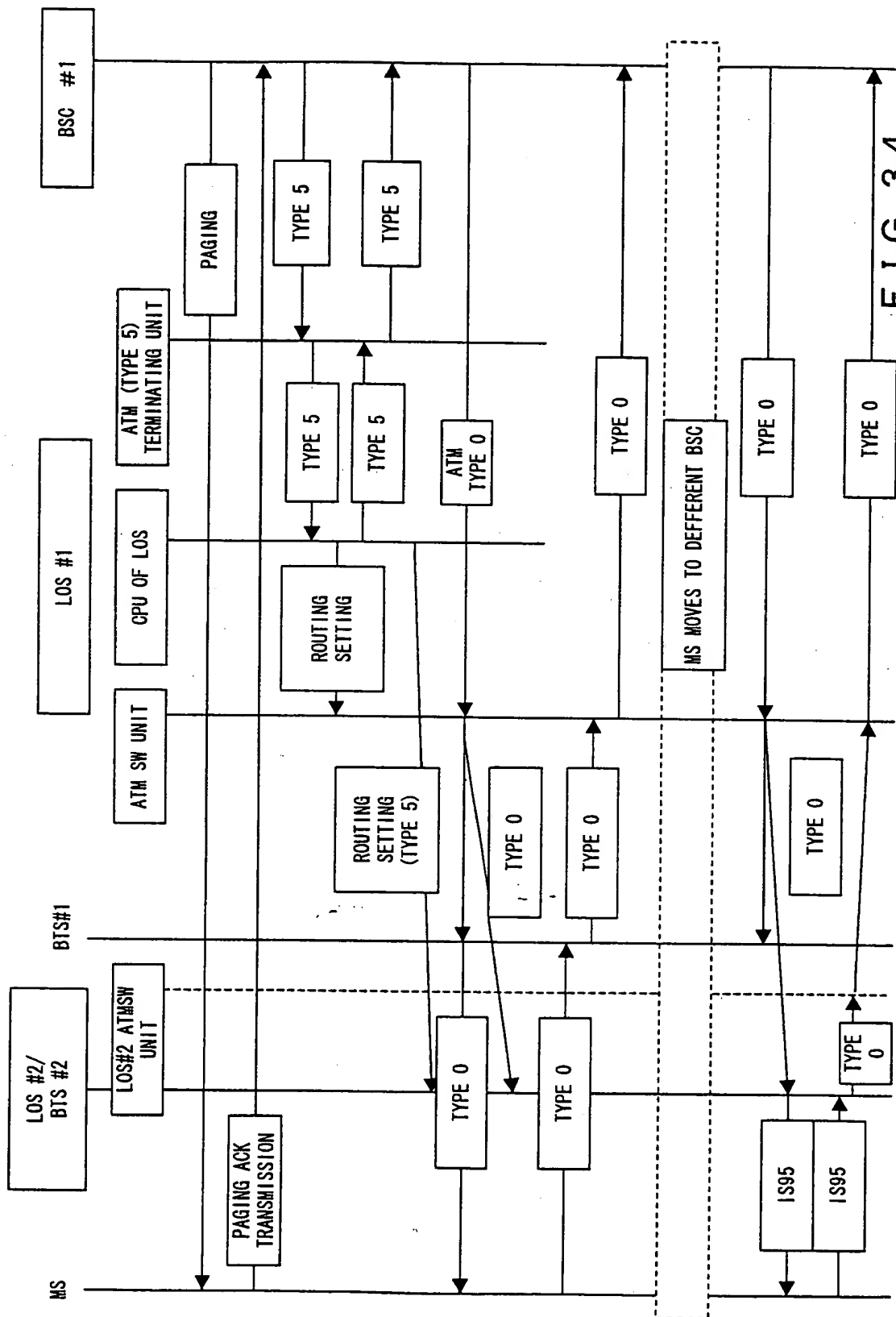


FIG. 34